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(54) Title: PERSONAL INSTANT COMMUNICATION SYSTEM

(57) Abstract: Method and system for carrying out telephone conversations between two or more users. Each user registers and communicates his personal profile and preferences to a core system. The core system receives from the users the profiles and the preferences and stores it. The system matches between the users according to their profiles and preferences and presents to users a list of candidates for conversations according to the results of the match. The users select one or more canditates from the results and the system creates a telephone connection between users and selected canditates.

PERSONAL INSTANT COMMUNICATION SYSTEM

Field of the Invention

The present invention relates to the field of telecommunication. More particularly, the invention relates to the field of managing personal presence and communication (voice or instant messages) over telephone lines.

Background of the Invention

Today, there is an emerging Internet-based 'culture' of CHAT, whereby people can connect (via a PC equipped with Internet connections and specialized software packages) to other people who are using similar technologies. They can 'CHAT' using text, or in some cases, Voice-over IP (Internet only). Among the software packages currently available, one can find ICQ™ from Mirabilis, and Instant Messaging™ from Microsoft. While the number of Internet users is still very limited (relative to those who use telephone communication, either fixed or mobile), there is no similar mechanism in the telecommunication world. Moreover, there is a need for telephone users to properly define their personal identity and control its publication, as well as manage the information regarding their presence and availability.

The Internet-based systems require users to be bound to a PC with an

Internet connection. Hence, this deprives users that do not have access to a PC, or do not have sufficient skills/knowledge to operate it properly, or are not stationary - from using such a service. In addition, many telephone users, both fixed and mobile, would like to be able to get an indication of the presence of a candidate for chat, even if the identity of the candidate is unknown. It would be desirable to connect easily to a chosen match, and conduct a communication session in total privacy (i.e., NO personal details revealed to the other party). Moreover, it would be desirable to have an indication of the presence of individuals online.

All the methods described above have not yet provided satisfactory solutions to the subject of 'chatting' over voice telecommunication lines, nor a satisfactory solution to an indication of the presence of an individual.

It is therefore an object of the present invention to provide such a method and system for carrying out 'chat' sessions over telephone lines.

It is another object of the invention to provide a method and system for indicating the presence online of individuals.

It is another object of the invention to provide a method for creating matches between individuals willing to chat or communicate, according to their personal details and preferences.

It is another object of the invention to provide a method for searching for individuals or groups with similar objects of interest, as candidates for 'chat'.

Other objects and advantages will be apparent as the description proceeds.

Summary of the Invention

In one aspect, the invention is directed to a method for carrying out telephone conversations and/or text/voice messages between two or more users related to their similar subjects of interest, comprising the following steps:

One) each user provides his personal profile and preferences to a core system (hereinafter briefly called "the system");

Two) the system receives from the users said profiles and said preferences and stores them;

Three) the system matches pairs or larger groups or provisioned users according to their profiles and preferences;

Four) the system presents to each of said matched users a list of candidates for conversations according to the results of said matching;

Five) each said user selects one or more said candidates from said results;

Six) the system creates a telephone connection between each said user and said selected candidate(s); and

Seven) the user converses with the selected candidate(s).

The steps described above can be carried out in the above or any other order.

In the first aforesaid step, the user also registers as a member of the system. Since this step involves the provision of information by the user, it will be called "the provision stage" and carrying it out will be called "provisioning". Alterations in a pre-existing service may be done at any time, even in the middle of a chat conversation. Such alterations are called "re-provisioning".

According to a preferred embodiment of the invention, the privacy of each user is maintained by preventing any other user from accessing his personal profile. Each user, however, may decide to reveal or direct the system to reveal a part of his personal profile to one or more other users.

According to the invention, the system may create a telephone connection only between two users or among more than two users. The result may be designated respectively as a conversation session in a private forum or a conversation session in an open forum.

In another aspect, the invention is directed to a system for carrying out conversations between two or more users provided with telephones, which comprises:

One) receiving means for receiving relevant information, comprising information provided by the user including the users' profiles and preferences, and comprising the conversations carried out between them;

Two) storage means for storing said received information;

Three) a database management system for the management and retrieval of said information;

Four) processing means for match-making between the users according to their profiles and preferences;

Five) control means for controlling the operations of the aforesaid storage means, database management system and processing means; and

Six) telephone line switching means for performing connections between different users.

Seven) call handling means to enable dynamic control of conversation, such as removing a participant from a chat, register a chat partner as 'preferred' candidate for future chats, and vice versa.

The control means, storage means, database management system and processing means are generally comprised in a central computer that manages the system of the invention and is suitably programmed to carry

out the process of the invention in every specific case. The said control means may control or not control the aforesaid receiving means, depending on the way in which information, and particularly the personal profiles and preferences of the users, is conveyed to said receiving means. The said storage means are generally a memory comprised in the central computer.

The personal profiles and preferences of the users may be communicated to the aforesaid receiving means, viz. the provisioning, may be carried out, in any convenient way, e.g. by telephone, by PC, by fax, by E-mail, by mail, e.g. by sending filled questionnaires, etc..

Information relating to the communication between users and the system of the invention or between different users can be displayed on visual interfaces of the users' phones, if they are provided with such interfaces. Such information may be an invitation for chat, presence of individual online and so forth.

According to a preferred embodiment of the invention, a user can express his wish for conversation with another user by:

One) SMS (Short Message Service);

Two) WAP (Wireless Application Protocol, i.e. a protocol that enables a cellular telephone to run preprogrammed data processing applications);

Three) Voice-Messages or any other communication protocol/service that

can work with telephone networks and handsets / terminals (SIM Tool KIT for example); or

Four) DTMF / IVR (dual tone multi frequency / Interactive Voice Response).

Brief Description of the Drawings

The above and other characteristics and advantages of the invention will be better understood through the following illustrative and non-limiting detailed description of preferred embodiments thereof, with reference to the appended drawings, wherein:

Fig. 1 schematically illustrates the system layout, according to a preferred embodiment of the invention;

Fig. 2 schematically illustrates the system as a switchboard, according to a preferred embodiment of the invention;

Fig. 3 schematically illustrates data flow during chatting, according to a preferred embodiment of the invention;

Fig. 4 schematically illustrates data flow on provision (registration), according to a preferred embodiment of the invention;

Fig. 5 illustrates a flow chart of the user's activities, according to a preferred embodiment of the invention;

Fig. 6 illustrates a flow chart of the stage of the provision, according to a preferred embodiment of the invention;

Fig. 7 illustrates the Personal table and a Profiles' table, according to a preferred embodiment of the invention;

Fig. 8 schematically illustrates a Networked System architecture, according to a preferred embodiment of the invention;

Fig. 9 illustrates a flowchart of the service, according to a preferred embodiment of the invention; and

Fig. 10 schematically illustrates match tables, according to a preferred embodiment of the invention.

Detailed Description of Preferred Embodiments

Fig. 1 schematically illustrates the system layout, according to a preferred embodiment of the invention. User 110 is connected to Core System 100 via his telephone (fixed / mobile) equipment 120. The Core System may be a server that contains computation means, memory means and appropriate software and/or hardware. The Core System must support a variety of communication mediums which connect the server to the users. The Core System carries out the connection between the chat participants. Therefore, it operates as a telephone network, whose operation is directed by a decision mechanism. Yet, the actual telephone switching is accomplished by the telephone network. The core system can either initiate a call through the telephone network (out-dialing in a service-node alternative) or signal the standard switch to perform the call (signaling/SS7 of an IN SCP).

The telephone connection between users and the core system can be done by using standard communication switches which communicate with the interface system on one side, and the telephone connections (Wireless protocols, E1, T1, IP) on the other. The telephone connections may be hardware and/or software produced and supplied by Cisco, Nortel, Siemens or others. In the event the switch does not have the proper connection capabilities required for this system, other complementary means can be used, such as:

- IN (Intelligent Network) SCP. As in standard IN/SCP implementation, each time the service is activated, the switch transfers the control (signaling data) to the SCP. The SCP, based on the match results and the service parameters, sends signaling controls to the switch indicating the call parameters. In the SCP implementation, the actual call initiation is made by the switch, according to the control signals (usually SS#7 protocol) sent by the SCP.

Alternatively, instead of the core system being connected to a telephone network and using that network to establish voice connections between or among the matched users (e.g. by passing telephone numbers of the respective users to the telephone network), the core system could be implemented within the telephone network.

In standard Service Node implementations – and unlike SCP implementations- it is the role of the Service Node to initiate the calls. In this case, the connection between the Switch and the Service Node is 'true' voice trunks (E1/T1), and NOT only signaling (SS#7), as in the SCP implementation Progeny of VSP/Comverse (former AMAREX, today – VSP division of Comverse). This platform works similarly to the Service Node, and enables link creation between lines for 2-party calls, as well as to full conferencing sessions.

There are optional modules that enable interfacing to external sources such as WEB, TV, IP. These enable connections across different media, such as telephone users with WEB surfers. For example, a WEB surfer can get an indication of the presence of an individual over his mobile telephone.

Fig. 2 schematically illustrates the system as a switchboard, according to a preferred embodiment of the invention. Users 201 to 208 are connected to Core System 100 via telephone lines.

The conversations ('chats') carried out are:

- Users 201, 203, 204, and 205 are participating in a "conference chat". A conference chat is a conversation opened to all the users, and as a rule

is about a specific subject.

- Users 202 and 207 are having a "private chat". A private chat is a conversation carried out between two individuals, and no one else is permitted to participate in this chat.
- Users 206 and 208 are having a private chat.

With the acceptance of 206 and 208, other user(s) might join this session.

Fig. 3 schematically illustrates data flow during a chat session, according to a preferred embodiment of the invention. User 311 communicates via telecommunication means 312 to the Core System 313. Details regarding the chat session are stored in the usage table 343 of database 314.

The telecommunication means in this case comprises telephone 312.

The tables in database 314 which are updated at any time are:

- Personal table 341;
- Profiles table 342;
- Usage table 343;

Channels table 344 is updated during the chat.

According to a preferred embodiment of the invention, the database comprises the following tables:

- **Personal Table** 341 contains personal information about the user, such as name, address, credit card, preferences and so forth. It may also contain information about the amount of time the user has used the system and the charge due for this usage.
- **Profiles Table** 342 contains information about the profile of the person/community the user would like to chat with, etc. According to one embodiment of the invention, this table contains a list of the users who are online at a given moment and their availability for chat. A user is considered as 'available' if he is online and has expressed his interest in chatting.
- **Usage Table** 343, contains information about the usage of the system. For example, a record of the table may contain information about a performed session, such as :
- User ID.
- Date and time of the start of the session;
- Date and time of the end of the session;
- Length of duration of the session; and
- **Channels Table** 344, contains information about the chat sessions (channels) which are in progress at a given moment.

In order to decrease the retrieval time from the tables, a more sophisticated structure may be implemented, such as chained-list, B-tree etc.

The database resides on a server with sufficient storage devices and computing performance. A configuration of such a server will depend upon such factors as the number of users, the size of databases and the traffic; a possible server to be used might be an Alpha server from Compaq. The database should be able to support some basic requirements of the system: performance, reliability, on-line manipulation (sort, search, select, extract, modify), locks, filtering and so forth. Any standard database supporting the above requirements can be used. For example, a relational database from Oracle of Informix might be employed. The database should be connected to the system by high-speed connection (LAN, for example);

Fig. 4 schematically illustrates data flow on provision (registration), according to a preferred embodiment of the invention. User 311 communicates via telecommunication means 412 with the Core system 413, which registers the relevant details into database 414. The user may communicate with the Core system 413 through a telephone 421 or by fax machine 422 or by using a PC 423. The database 414 comprises two tables, a Personal table 341 and a Profiles table 342 that are updated during the chat. The Core system 413 comprises a Customer Care Center 424 which assists the user to fill out a form.

The user may perform the provision in two ways:

- directly, using a PC 423. This can be done for example by filling a questionnaire and sending it to the Core System by e-mail, filling a questionnaire which is a part of a web-page, and so forth.
- with the assistance of the Customer Care System. Customer Care System (or one of several centers) provides the assistance of a customer-care specialist. The specialist will register on his behalf the preference profiles in the database 414 (The specialist can assist by tutoring the user in filling in the details). The user may perform the provision stage by telephone 421 or by fax 422. In case of fax, a questionnaire is sent to the Customer Care System, or alternatively analyzed by computation means, such as OCR (Optical Character Recognition) and OFR (Optical Form recognition). The questionnaire may also be sent by mail.

Fig. 5 illustrates a flow chart of the user's activities, according to a preferred embodiment of the invention.

- In step 510, the user registers and defines his personal profile, and the profiles of the desired candidates for communication (or community channels). The information will be used when the service performs a search for matching candidates.
- In step 520, the user informs the system of his availability for communication, and defines the service parameters, such as subject of

interest (for this chat), profile of the persons he would like to chat with, and so forth.

- In step 530, the system performs a search, based on input from the user's profile, user's requested candidate profile/community channel, location and the other activated users' profiles (/active community channels).
- In step 540, the system notifies the user of the possible matches. During the chat session, a user can dynamically control various parameters such as to mark the current correspondent as 'preferred' for future matches. On multi-user chat sessions, a user can remove one or more of the participants from the session. This can be done via SMS (Short Message Service), PA (Personal Assistance), Voice message, WAP (Web Application Protocol) and so forth. If the user decides to select a match, then he indicates his choice using the interface system, and the system creates the connection to the matching user.
- In step 550, the user participates in a chat with the selected user/users.
- In step 560, the user disconnects the chat. At this stage, he may activate the system again, search for new partners for chat by returning to stage 520, or quit the system.
- In step 570, the user quits.

Fig. 6 illustrates a flow chart of the Provision stage, according to a preferred embodiment of the invention.

- In step 600, the user decides whether to use a PC for provisioning. If the answer is positive, then the process continues to step 611; if otherwise, the process continues to step 621.
- In stage 611, which is the starting point when using PC for provisioning, the user connects to a WPP (Web Personal Provisioning, i.e. filling a questionnaire on a Web-page). The WPP resides - logically - at the service provider's premises, although it can reside on any server (WEB or other) that provides a link for users to the service provider's databases. An example of such a product is WPP from Comverse Network Systems.
- At 612, the user registers with the service.
- In stage 613, the user defines his personal profile
- In stage 614, the user defines the profile of the requested candidate / subject of chat-group for communication. The information will be used when the service performs the search for matching candidates.
- In stage 615, the user is asked if he wants to continue to define more profiles of persons he would like to chat with, or to submit the information defined so far to the core system. If the user decides to submit the information defined so far, then the control goes to step 616, and then to step 630. Otherwise, control goes to step 614.
- In step 616, the information is submitted to the core system;
- In step 621, which is the starting point of the provisioning process performed without PC, the user may fill out a hard copy form, and send

it to the core system via fax (step 625). Alternatively, he can call Customer Care Center 424 of Fig. 4 above (step 622), which will fill out the form for the user according to his answers. Instead of fax, the user may employ other means for sending hardcopies, such as e-mail.

- In step 622, the user calls the Customer care center in order to register via telephone call;
- In step 623, the user receives instruction form the Customers care center;
- In step 626, the information is submitted to the core system;
- In step 630, the user is activated, i.e. the user is declared as available for chat. This can be done by placing an appropriate flag in the user's record (in Profiles' table of the database).

Fig. 7 illustrates the Personal table and the Profiles table, according to a preferred embodiment of the invention. While the Personal table 701 contains information about the user, the Profiles' table 702 contains information about his preferences. The Weights table contains information about the importance the user gives to his preferences.

The weights list 704 expresses levels of importance: from "must not be" to "must be". For instance, there are users who want to chat only about sports, while others may prefer anything but sports. Those values are the contents of Weights table 703.

According to an embodiment of the invention, the location of the user may be static (residence) or dynamic (relevant for mobile phones, according to the information received from his mobile telephone).

According to an embodiment of the invention, the database also contains parameters of automatic invocation of availability for chat. For instance, when a user would like to be automatically declared as available for chat, for how long and what will be his profile during this period.

In the following example, User4 wants to chat only with males between 18 and 25 years old. The subjects of conversation are not important. User1 wants to chat only with men between the ages 30 to 45 and only about sports. He prefers to chat with users from NY.

For the purposes of matching, the system can implement one of the algorithms known in prior art for resolving such problems. Each algorithm has its own benefits and drawbacks.

One example would be a smart algorithm that takes into consideration the preferences of both - the person who is searching and the person who matches and that will express the match in a tangible term, such as percentage of fitness.

Table 705 contains information about the chat-channels through which chats are currently being carried out. It contains two columns: the conference name and the present subject.

Fig. 10 schematically illustrates match tables, according to a preferred embodiment of the invention. Table 1010 illustrates the match of User4 to the other users, according to the tables illustrated in Fig. 7.

The rules are:

a) If the matched criterion is "Don't care", then a minus sign is assigned in the appropriate place in the Match table;

b) If the matched criterion is "Must be" or "Must not be" and the result is positive, then a value of 1.0 is assigned to the appropriate cell in the Match table;

c) If the matched criterion is "Must be" or "Must not be" and the result is negative, then a value of 0.0 is assigned to the appropriate cell in the match table;

d) If the matched criterion is "Important to be" or "Important not to be" and the result is positive, then a value of 0.75 is assigned to the appropriate cell in the match table;

e) If the matched criterion is "Important to be" or "Important not to be" and the result is negative, then a value of 0.25 is assigned to the appropriate cell in the match table.

Therefore, according to table 1010, User2 is the best match for User4, and the "match factor" is 0.75.

Table 1020 illustrates the match of User2 to the other users, according to the tables illustrated in Fig. 7. According to table 1020, User4 matches to User2 only by 0.0625. Therefore, the smallest value of the scores 1.00 and 0.0625 is 0.0625. This value, 0.0625, is suitable for the criterion of "fitness percentage", i.e. 6.25%.

It is obvious that there are better algorithms for performing the match, as known to any average programmer. The algorithm described above was only for the sake of brevity. Moreover, hardware means may also be engaged in order to speed up the matching process.

Chat channels (conferences) can also be preferred or restricted by some personal details, such as gender and age. However, channels table 705 (in Fig. 7 above) contains only two columns: the conference name and the present subject. The match engine can distinguish between the private chat and the conference chat by an additional row in Profiles' table 702, which would express the choice between private chat and conference chat.

According to a preferred embodiment of the invention, the database may

contain a 'banned' list. A user can define another user as 'banned' if he does not want any contact with the 'banned' person. The system does not indicate the online presence of either person, and in any case does not connect between them.

It is obvious that the database can be designed in a variety of ways, and still achieve identical results, as any average database professional will understand. This example was presented solely for the purposes of clarification.

Fig. 8 schematically illustrates a Networked System architecture, according to a preferred embodiment of the invention. Normally, the system operates in the scope of one network operator, such as 810, 820,...,870. Users 811 to 814 are subscribers of operator 810, users 831 to 834 are subscribers of operator 830, users 871 to 873 are subscribers of operator 870, and so forth. Operators 810, 820 and 830 are connected to Area Gate 890 and operators 840 to 870 are connected to Area Gate 891. Operators that wish to be 'networked' are connected to PIC-Gateway (when such gateways are connected together). This connection enables users that are connected to different operators to participate in the same chat sessions. The connection is not limited by country or other regional boundaries. Furthermore, the operators can operate a mixture of network types, e.g. wireline, wireless and long distance networks.

Fig. 9 illustrates a flowchart of the service, according to a preferred embodiment of the invention.

- The process starts at step 900;
- In step 901, the user registers to the system;
- In step 902, the user provides his personal profile and preferences for the present chat;
- In step 903, the system stores the profile in the appropriate database;
- In step 904, the system invokes a match mechanism in order to find proper candidates for chat;
- In step 905, user receives (i.e. SMS, voice announcement, etc.) a full or partial list of the matched candidates from the system.
- In step 906, the user is given a choice of:
    - Quitting. Then control goes to step 999;
    - Returning to the step 902, where the user provides his preferences to this chat; or
    - Selecting candidates for chat from the displayed list. In this case control goes to step 907;
- In step 907, the user selects one or more candidates from the displayed list;
- In step 908, the system tries to establish a telephone connection between the user and the selected candidates;
- In step 909, the system analyses the results of the trial. If a connection

was established, control goes to step 910; Otherwise control goes to step 905, where the list of the matched candidates is displayed;

- In step 910, the chat is carried out. During the chat, the user may change his profile and/or preferences by inputting new corresponding parameters, using SMS service, interacting with the core system by PC, etc.;
- In step 911, the chat is disconnected, then control goes to step 902 where the user may provide a new profile to the system, and restart the process.

The invention also has additional and/or optional features that provide substantial operational benefits. One of such features will be called herein "Presence Management". Presence Management means that the subscriber can make himself available or not, to selected individuals or to groups (such as relatives), and this can be done by provisioning or by re-provisioning. The re-provisioning may be a permanent change to the customer profile or preference profile, or, alternatively, may be only a temporary change for a specific session. Such changes can easily be implemented by a computer and/or associated suitable software (for instance, a questionnaire on a Web page). Alternatively, these changes can be carried out by using inputs from a telephone handset.

Another feature and benefit of the invention is the security of information.

This includes not only the CLI (Caller Line Identification) information, but also all personal information beyond what is required to make the match. The system enables the user to decide which information is confidential and which is not.

It should be noted that the system is not limited to subscribers of one service provider, but may be extended to multiple network operators. This can be carried out by using the appropriate network architecture.

The operation of the Core System is controlled by software means, which may comprise, for example, the following parts:

- User interface. A software element intermediates between the user and the Core system. The user is communicating with the Core system by voice information or textual information. This information is translated by this element of the software into a format that is compatible with the Core system;

- Database management. A software element manages data storage, and retrieval to or from the database;

- Switching control. A software element which controls the switching operation for connecting between individual user;

- Matching. A software element matches between users according to their profiles and preferences;

- Provision. A software element manages the provision session. It comprises sub-elements which control the interaction with the user according to the device through which the user communicates (i.e. telephone, PC, etc.) in the provision session.

The above examples and description have of course been provided only for the purpose of illustration, and are not intended to limit the invention in any way. As will be appreciated by the skilled person, the invention can be carried out in a great variety of ways, employing more than one technique from those described above, all without exceeding the scope of the invention.

CLAIMS

1. Method for carrying out telephone conversations between two or more users, comprising the following steps:

a) each user registers and communicates his personal profile and preferences to a core system;

b) said core system receives from the users said profiles and said preferences and stores it;

c) the system matches between said users according to their profiles and preferences;

d) the system presents to users a list of candidates for conversations according to the results of said match;

e) users select one or more said candidates from said results; and

f) the system creates a telephone connection between users and selected candidates.

2. Method according to claim 1, further comprising performing conversation between users and candidates.

3. Method according to claim 1, further comprising transmitting messages from users to candidates.

4. Method according to claim 1 or 2, further comprising, if a selected candidate is not available, the step of instructing the system to

communicate to the user, to whom said candidate has been presented, when said candidate has become available.

5. Method according to claim 1, further comprising retaining the privacy of each user is by keeping his personal profile away from the other users and by not revealing any connection information to said other users.

6. Method according to claim 1, wherein the system creates a telephone connection in private forum only between two users.

7. Method according to claim 1, wherein the system creates a telephone connection in open forum between a plurality of users.

8. Method according to claim 1, wherein registration and the personal profiles and preferences of the users are communicated to the core system by a means chosen from among the group consisting of telephone, PC, fax, E-mail, and mail.

9. Method according to claim 1, wherein a user changes his profile while performing conversation.

10. Method according to claim 1, wherein a user changes his preferences while performing conversation.

11. Method according to claim 1, further comprising a user's requesting conversation with another user by means chosen from the group consisting of SMS (Short Message Service), WAP (Wireless Application Protocol), Voice-Messages, IVR, and DTMF.

12. Method according to claim 1, further comprising determining the availability or non-availability of a user to selected individuals or to groups.

13. Method according to claim 12, wherein the availability or non-availability of a user determined by provisioning or re-provisioning.

14. Method according to claim 1, further comprising determining by each user the information that can be given to other users, beyond what is required to carry out the steps claim 1.

15. System for carrying out conversations between users provided with telephones, which comprises:

a) means for receiving relevant information, comprising users' registration, profiles and preferences and conversations carried out between users;

b) storage means for storing said received information;

c) a database management system for the management and retrieval of said information;

d) processing means for match-making between users according to their profiles and preferences;

e) control means for controlling the operations of the aforesaid storage means, database management system and processing means; and

f) telephone line switching means for establishing connections between different users.

16. System according to claim 15, further comprising connections between the system and the users comprising standard communication switches which communicate with the interface system on one side and the telephone lines on the other.

17. System according to claim 15, wherein the control means, storage means, database management system and processing means are comprised in a central computer programmed to manage the system.

18. System according to claim 15, wherein the control means further control the receiving means.

19. System according to claim 15, further comprising visual interfaces provided in the users' phones for displaying information relating to the communication between users and the system or between different users.

20.System according to claim 15, wherein the storage means are a memory comprised in a central computer.

21. System according to claim 15, wherein the receiving means are adapted to receive registration and communication of personal profiles and preferences of the users through communication means chosen from the group consisting of telephone, PC, fax, by E-mail, and mail.

22. Apparatus for carrying out telephone conversations between two or more users, comprising:

a) a core system to register the personal profile and preferences of each user, said core system comprising a memory;

b) a processor to matches between said users according to their profiles and preferences;

c) presentation device to present to users a list of candidates for conversations according to the results of said match; and

d) communication links to create a telephone connection between users and selected candidates.

23. Apparatus according to claim 22, further comprising a messaging device for transmitting messages from users to candidates.

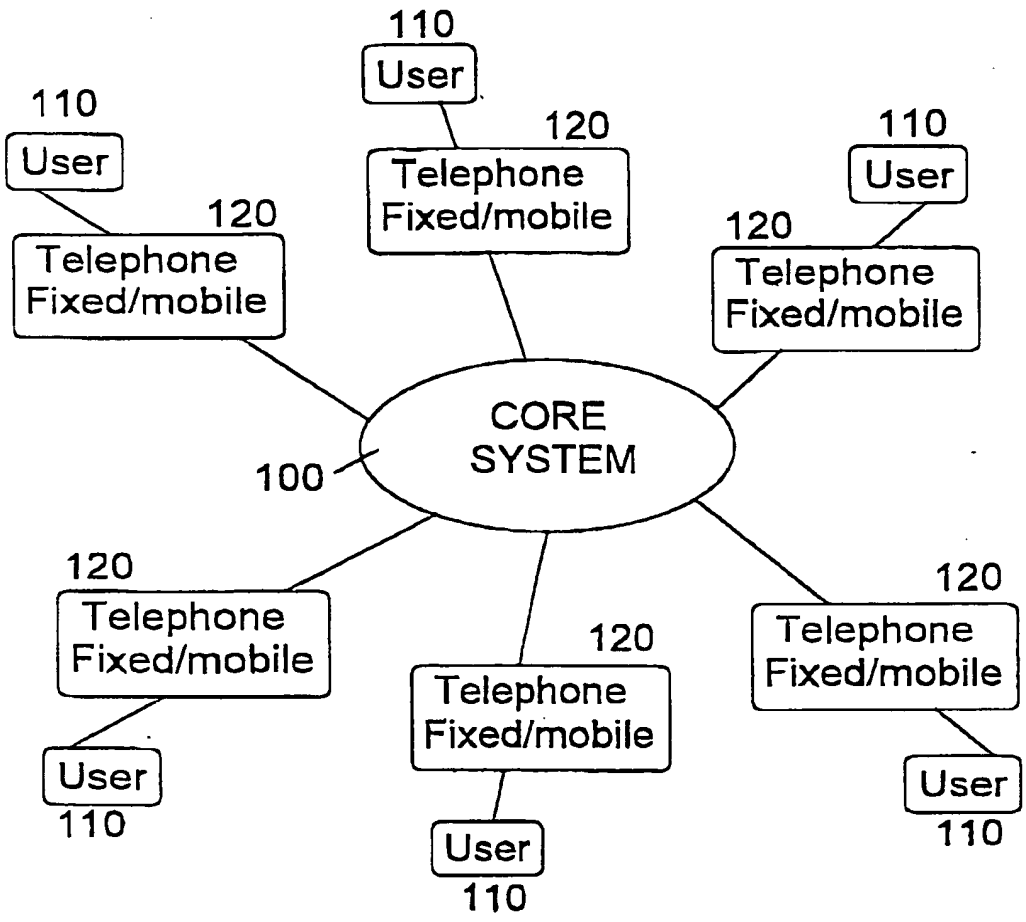
24. Apparatus according to claim 22, comprising private telephonic links to create a telephone connection in private forum only between two users.

25. Apparatus according to claim 22, comprising telephonic links to create a telephone connection in open forum between a plurality of users.

26. Apparatus according to claim 22, comprising data links to receive the registration and the personal profiles and preferences of the users by the core system by a device chosen from among the group consisting of telephone, PC, fax, E-mail, and mail.

27. Apparatus according to claim 22, further comprising messaging circuitry for allowing a user to request conversation with another user using a service chosen from the group consisting of SMS (Short Message Service), WAP (Wireless Application Protocol), Voice-Messages, IVR, and DTMF.

28. Apparatus according to claim 22, further comprising circuitry for determining the availability or non-availability of a user to selected individuals or to groups.



System Layout

Fig. 1

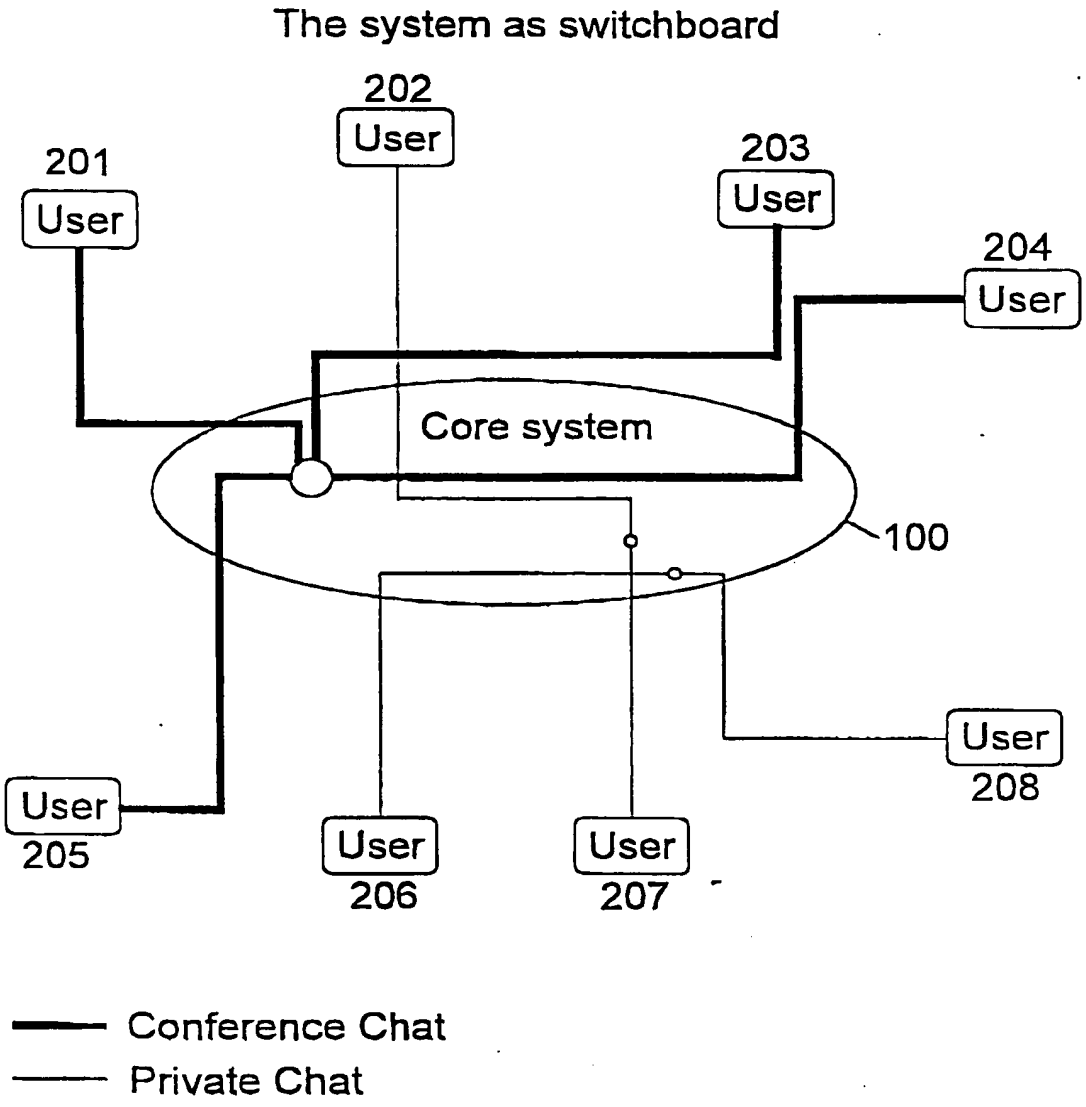

The system as switchboard
202
User
201
User
203
User
204
User
Core system
100
User
208
User
205
User
206
User
207
Conference Chat
Private Chat

Fig. 2

Information Flow on Chat

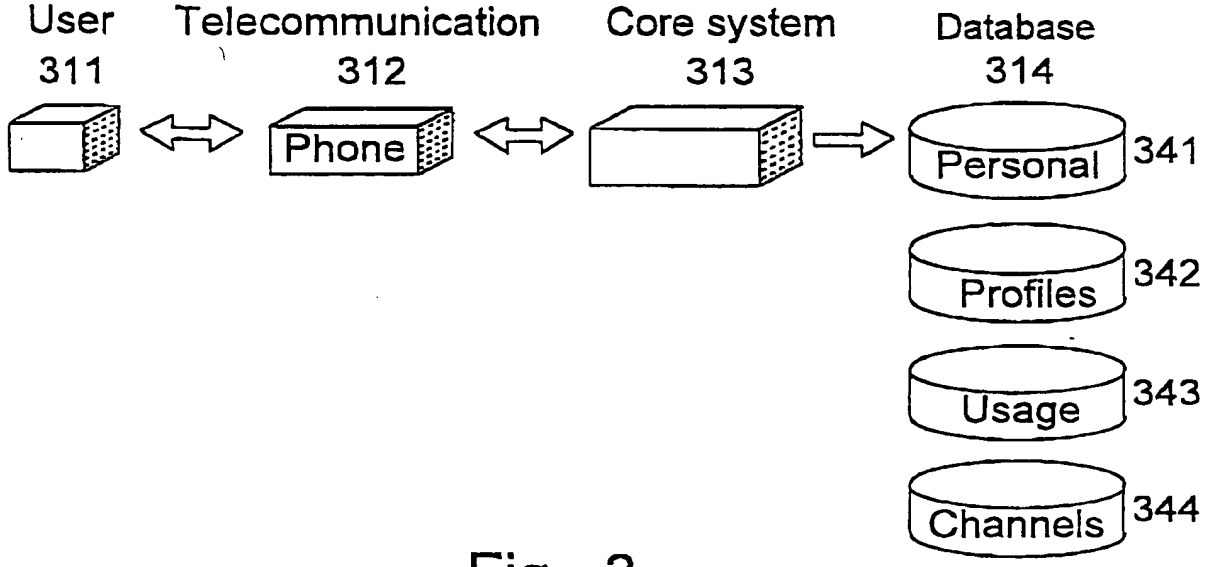


Fig. 3

Information Flow on Registration

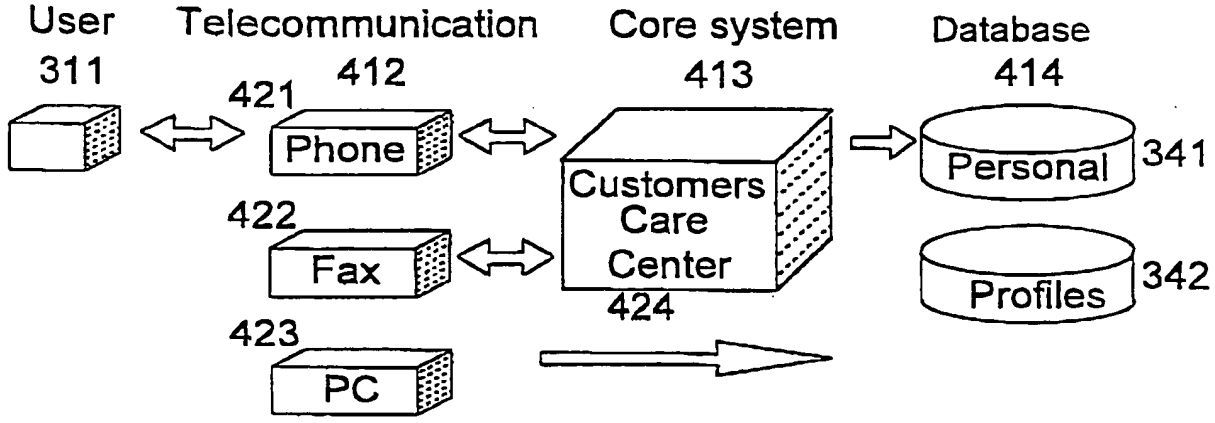


Fig. 4

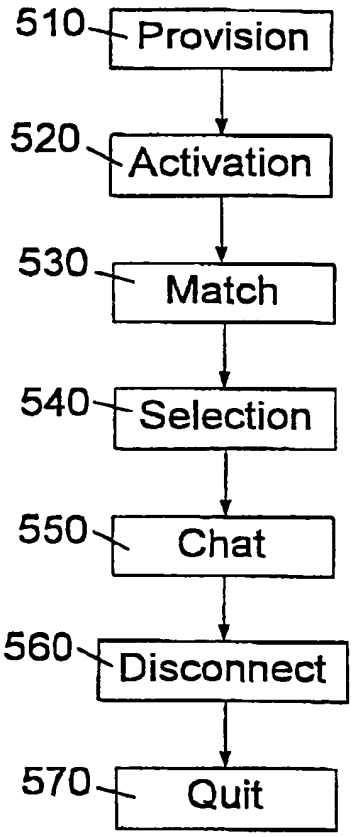

510
Provision
520
Activation
530
Match
540
Selection
550
Chat
560
Disconnect
570
Quit
User's activity

Fig. 5

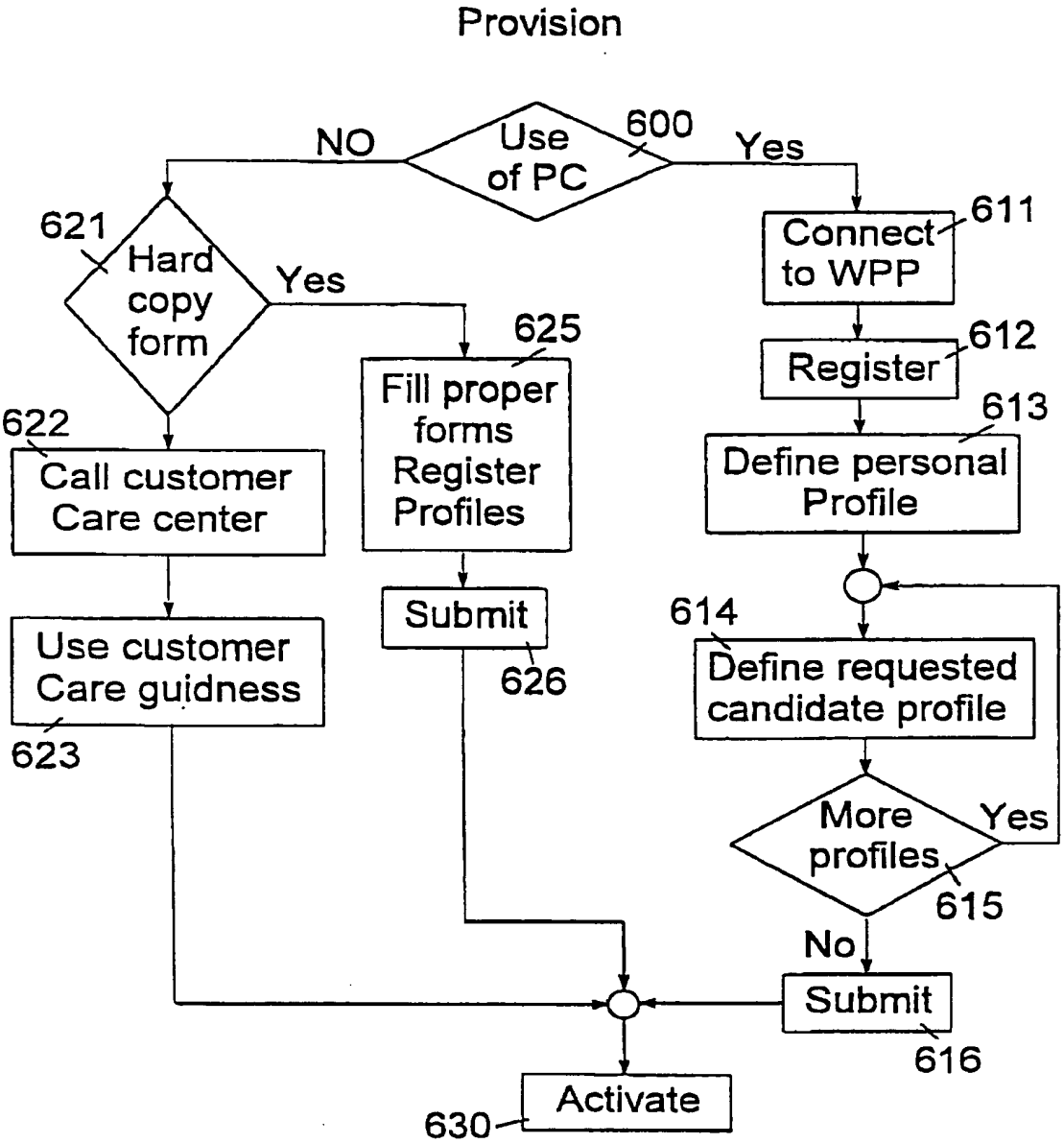

Provision
Use of PC
600
NO
Yes
621
Hard copy form
Yes
622
Call customer Care center
Use customer Care guidness
623
625
Fill proper forms Register Profiles
Submit
626
611
Connect to WPP
612
Register
613
Define personal Profile
614
Define requested candidate profile
More profiles
Yes
615
No
Submit
616
Activate
630

Fig. 6

Personal table 701

	Age	Gender	Location	Subject	Profession	...
User1	45	M	NY (US)	Sports	Accountant	
User2	25	M	Paris (FR)	Pets	Engineer	
User3	23	M	CA (US)	Computers	Driver	
User4	18	F	Paris (FR)	Cooking	Student	
...						

Profiles table 702

	Age	Gender	Location	Subject	Profession	...
User1	30-45	M	NY	Sports		
User2				Pets	Housewife	
User3				Computers	Programmer	
User4	18-25	M	Paris (FR)	Cooking	Student	
...						

Weights table 703

	Age	Gender	Location	Subject	Profession	...
User1	5	5	4	5	3	
User2	3	3	3	4	4	
User3	3	3	3	5	5	
User4	5	5	4	3	3	
...						

Weights list 704

Weight	Description
1	Must not be
2	Important not to be
3	Don't care
4	Important to be
5	Must be

Channels table 705

Name of conference	Subject
NY 30+	The NYPD show
Teen	The place for u
...	...

Fig. 7

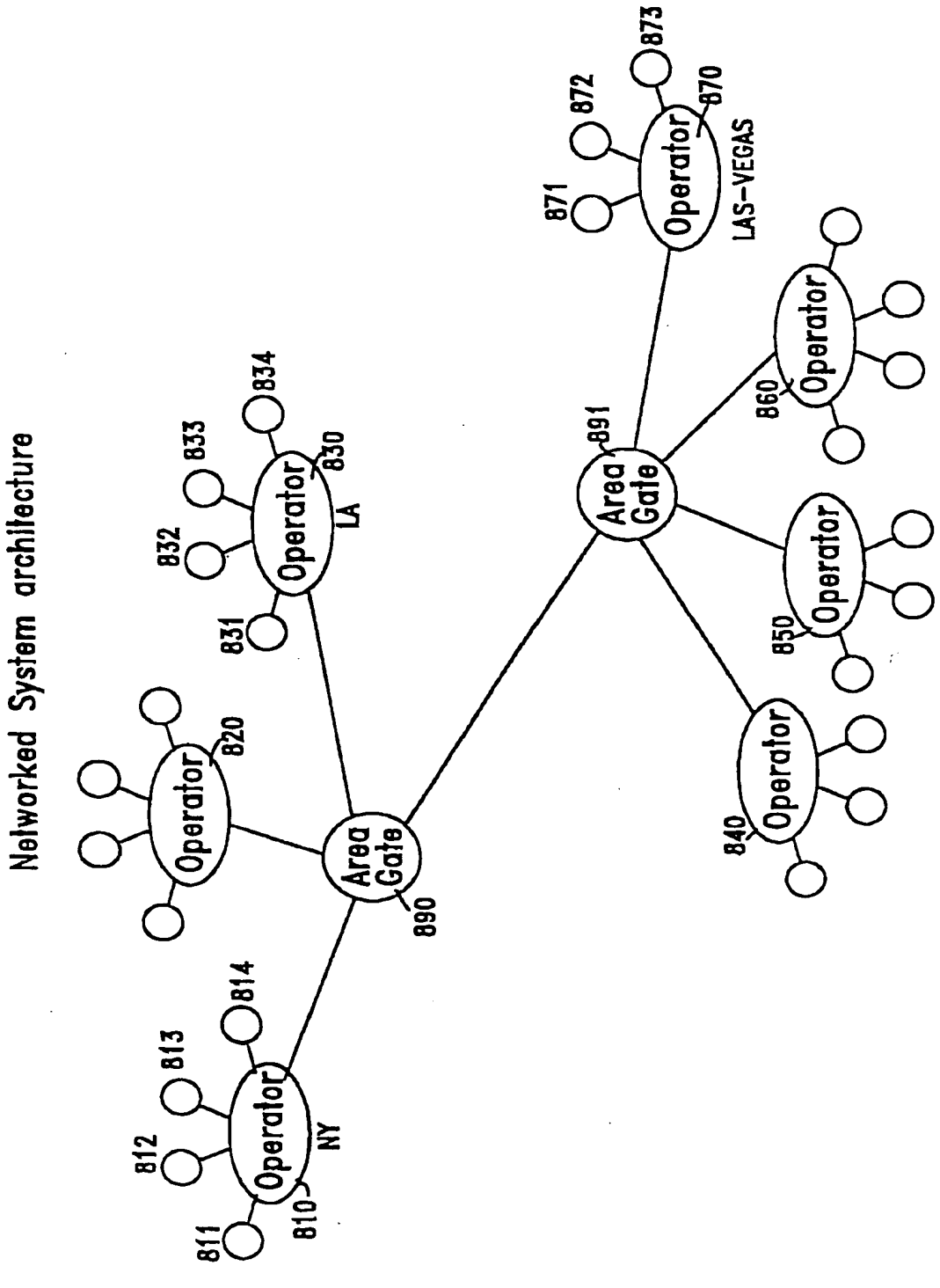

Networked System architecture
Operator
NY
810
811
812
813
814
Area Gate
890
Operator
820
Operator
LA
830
831
832
833
834
Area Gate
891
Operator
LAS-VEGAS
870
871
872
873
Operator
840
Operator
850
Operator
860

Fig. 8

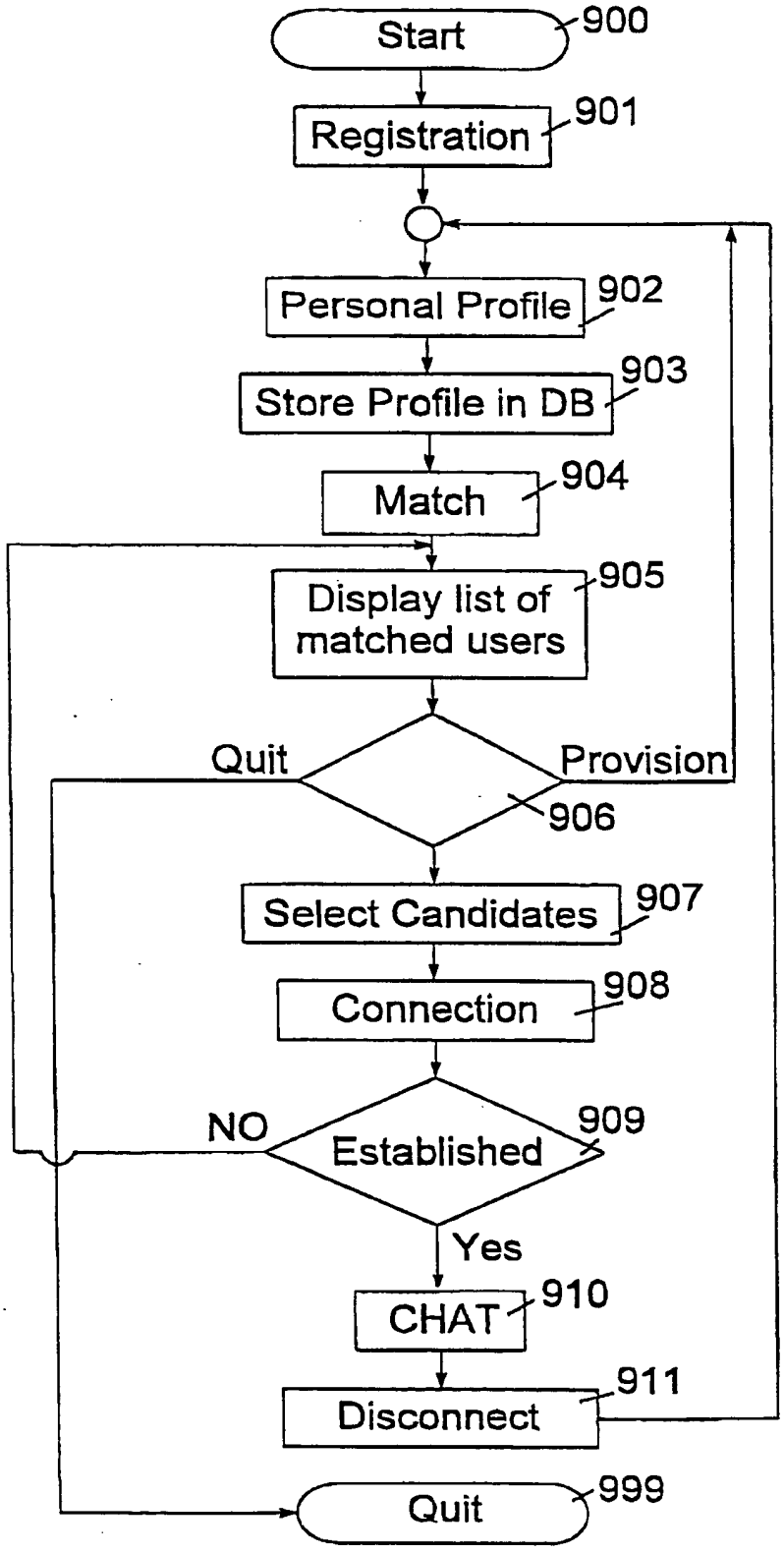

Start
900
Registration
901
Personal Profile
902
Store Profile in DB
903
Match
904
Display list of matched users
905
Quit
Provision
906
Select Candidates
907
Connection
908
NO
Established
909
Yes
CHAT
910
Disconnect
911
Quit
999

Fig. 9

Match table for User4 – 1010

	Age	Gender	Location	Subject	Profession	Match
User1	0.00	1.00	0.25	-	-	0.00
User2	1.00	1.00	0.75	-	-	0.75
User3	1.00	1.00	0.25	-	-	0.25
User4	-	-	-	-	-	-
...						

Match table for User2 – 1020

	Age	Gender	Location	Subject	Profession	Match
User1	-	-	-	0.25	0.25	0.0625
User2	-	-	-	-	-	-
User3	-	-	-	0.25	0.25	0.0625
User4	-	-	-	0.25	0.25	0.0625
...						

Fig. 10